## Converting Units

The TI-89 has a built-in unit converter. On the calculator screen physical units are preceded by an underscore \_ . The system of units uses the converter arrow  $\blacktriangleright$  to switch between different types of units.

You may directly type the commands for doing unit conversion. The keys  $\bigcirc$  **MODE** give the underscore and the keys **2nd MODE** give the converter arrow.

Try,

3\_km ▶\_ft [ENTER]

This converts kilometers to feet.

To save time with the typing, you press the keys 2nd 3 to enter the units menu. This gives access to the units that are pre-defined on the calculator.

Constants EB+ Len9thAn9+
Areaacre≯ Volumecup≯
Timeday≯ Velocityknot≯
Acceleration
Amount of Substance _mol+
L
USE ← AND → TO OPEN CHOICES

Try,

18\_rod ▶\_m [ENTER]

You may set up your own user defined units on the calculator. For example suppose you want to use the units feet per second (fps). From the homescreen press F4 1 1:Define. Type in the following into your calculator.

Define \_fps = \_ft/\_s ENTER

mth 93

If you go back into the units menu **2nd 3** you will see \_fps inside the velocity options.

Try,

60\_fps ▶\_mph ENTER

The calculator's scheme for converting will work between all sorts of units. There is one exception. Converting between temperature systems requires the special command: **tmpCnv(**. You can get this command from the calculator's catalog. The temperature systems  $_{\rm C}$ ,  $_{\rm C}$ ,  $_{\rm K}$ , and  $_{\rm R}$  are in the units menu.

Try,

 $tmpCnv(52_{F},_{C})$  [ENTER]

Done in T<sub>E</sub>X.